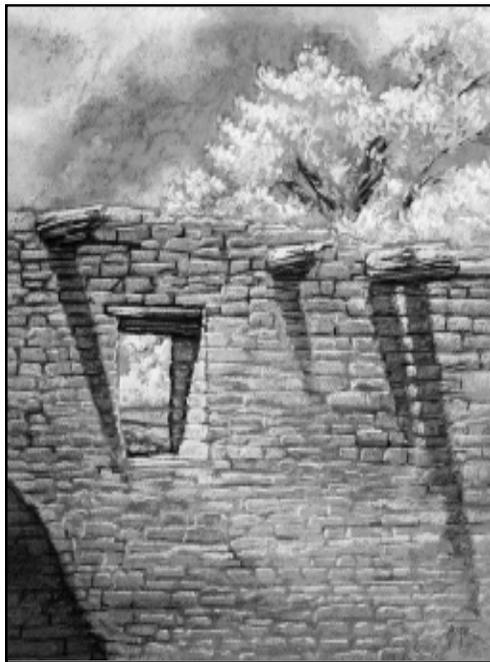


# AZTEC RUINS NATIONAL MONUMENT

## Teacher's Guide

GRADES 4-7



**Compiled by Theresa Nichols**  
**Cover & Illustrations by Jim Fuge**

  
**HILTON**  
PUBLISHING  
DURANGO, COLORADO  
[www.hiltonpublishing.com](http://www.hiltonpublishing.com)

# Acknowledgements

---

## Content Contributors

Gregory Cajete

John Stein

Peter McKenna

Dabney Ford

James Trott

Tom Windes

Pam Hellman – “Corn”

Sandra Nelson – “Impacts on the Environment,” “Resources Near & Far”

Cynthia Duke – “Imagination Pots”

Mike Goza – “Investigating Great Houses”

Julie Brickhouse – “The Life of an Artifact,” “What Happened Here?”

Rebecca Seiferle – “Poetry in Ruins”

Katrina Jameson – “Living in the Past, Present, & Future”

Amy Wise – “Directions to the Past”

Joe Rhoades – “Raising the Roofs”

Susan Carter – “Using Plants to Meet Basic Needs,” “Identifying Plants”

Tanya Strider

Arlis Friez

Donna Burns’ fourth-grade class

Bureau of Land Management Anasazi Heritage Center – glossary from *Intrigue of the Past*

## Testers & Reviewers

Belinda Swope

Melinda Coleman

Darlene Keeling

Jolleen Myers

George Jewett

Suzanne Russell

Brandi Sparks

Debbie Williams

Mary Ann Maslak

Cynthia Duke

Tina Ruybalid

John Frazzini

Leslie Good

Connie Vaughn

Donna Burns

Lynn Spence

Uma Krishnaswami

Carol Kecman

## Additional Thanks

Carol Ellick

Gayle Lopes

Grady Griffith

Belinda Swope

James Trott

Judy Chetwin

Linda Seymour

Patti Bell

Gene Adams

Donna Burns

Jane Harvey

Tom Windes

Glynn Brashear

**This guide was funded with a grant from the  
National Park Foundation**

*Additional Funding and Support were provided by:*

Phillips Petroleum Company  
Southwest Parks and Monuments Association  
Office Max  
New Mexico Arts, a division of the Office of Cultural Affairs  
Western States Arts Federation  
Rural Arts Economic Development Initiative  
New Mexico State Historic Preservation Office  
Statistical Research  
Western Cultural Resource Management, Inc.





# Table of Contents

## INTRODUCTION

Letter to Teachers.....	ix
How to Use This Guide.....	x
Preparing for Your Visit.....	xii
Guidelines for Visiting Aztec Ruins National Monument.....	xiii
“A Place for Connections” .....	xiv
“Looking Out a Pueblo Window,” Foreword by Dr. Gregory Cajete.....	xviii
Relationship of Lesson Procedures to New Mexico Education Standards.....	xxii

## STUDENT PROJECTS

### Level I – BEGINNING

Using Plants to Meet Basic Needs.....	3
Identifying Plants.....	9
Resources Near & Far.....	15
Corn.....	21
Directions to the Past.....	29
Graffiti.....	37
Poetry in Ruins.....	43
Impacts on the Environment.....	49
Now & Then: A Scavenger Hunt.....	55

### Level II – INTERMEDIATE

Imagination Pots.....	63
Living in the Past, Present, & Future.....	69
The Life of an Artifact.....	75

### Level III – ADVANCED

Investigating Great Houses.....	81
Raising the Roofs.....	89
What Happened Here?.....	95

## RESOURCES

Biographies: Archeologist Profiles.....	R-3
Glossary.....	R-18
References.....	R-21
Teacher Evaluation Form	



# INTRODUCTION





# Dear Teacher

---

*The large chamber, smelling of the earth in which it was buried, whispered quietly of song, movement, ceremony. The air was thick with stories – stories with fine edges and misty centers that I could not touch.*

That is what I remember most about my first visit to the great kiva at Aztec Ruins National Monument in 1976. Although I and the other students in my archeological field school came for educational knowledge, I made other, more personal connections instead. I breathed in the kiva for a long time, relishing its cool dimness on that hot August day, listening for messages I might take with me.

That first experience portended a long relationship I would develop with Aztec Ruins. As I return daily to this workplace of ten years, I continue to find inspiration and personal meaning. The pleasure I feel in working and being here is overshadowed, however, by the knowledge that archeological sites throughout this region are suffering from a variety of forces. Looting, vandalism, casual artifact collecting, mining, damming, road construction, natural deterioration – all are seriously threatening the irreplaceable cultural heritage embodied in these sites. As the destruction continues, I feel a sense of personal loss, and loss for my children and future grandchildren.

Keepers of these sites know that to help halt this destruction, we need to educate the future caretakers – our children – about the importance of preserving the resources. We need to educate children about the rich opportunities these resources provide for learning and understanding. Their landscapes, structures, and artifacts are tangible connections to people of the past – avenues for learning about and appreciating who they were and how they lived. Their stories invite us to seek personal meanings, and encourage us to reflect on our own lives. For Southwestern American Indians who are descendants, these sites are alive with spirits and are of continuing spiritual and cultural significance.

An act of looting or vandalism affects more than a physical site. It is a degradation of our cultural heritage, and affects every individual, the local community, and the American people as a whole. It is also a desecration to the American Indian descendants, their ancestors, and the spirits that inhabit these places. Our children need to feel the value of these places. They need to contribute to their preservation rather than their demise.

Educators can help engender a stewardship ethic among young people. They can include Aztec Ruins as a vital part of their curriculum, using it as a vehicle to teach a variety of subjects, and introducing children to its stories, its relevance to their lives, and its value in our cultural heritage. This guide presents information and lesson plans for educators so that they might gain the knowledge and tools and develop the interest to enable them to use the site as an integral part of their teaching.

All children in our region should have the opportunity to visit, learn about, and develop personal connections to Aztec Ruins National Monument. When we provide them with that opportunity, we all participate in the preservation of this place and our broader cultural heritage.



Chief of Interpretation  
Aztec Ruins National Monument

# How to Use this Guide

---

These teaching materials are for educators in classrooms, outdoor education, youth groups, scouting, and after-school programs. They support many New Mexico educational standards in the subjects of science, social studies, language arts, mathematics, and art. Although targeted for fourth through seventh grade levels, educators can easily adapt each lesson for upper or lower grades.

The guide's aim is to stimulate use of the monument by educators. Therefore, lesson procedures require that users either visit Aztec Ruins or borrow the trunk of replica artifacts from the monument to use in the classroom. Each lesson encourages students to explore some aspect of the people and remains of Aztec Ruins, while addressing curriculum needs in a variety of subjects. The chart on page xxii identifies the New Mexico educational standards that each lesson addresses.

Educators with varying levels of knowledge about archeology, past cultures, and Aztec Ruins can use this guide. The introduction contains information and comments about Aztec Ruins, from both an archeological perspective and an American Indian perspective. Each lesson contains background information that will help teachers use the lesson with students. Short biographies of archeologists who have worked at the site provide additional information about the scientific exploration of Aztec Ruins, as well as reveal personal information about those workers. The glossary at the end of the guide defines key words used throughout the text, and the reference section recommends resources for educators and students for further study. Several references are available to borrow or buy from the monument.

Many of the lessons reinforce concepts used in archeology. For some educators, familiarity with the process of archeology will make teaching those particular lessons easier. An excellent reference used in many of the lessons is *Intrigue of the Past, A Teacher's Activity Guide for Fourth through Seventh Grades*. The *Intrigue* guide teaches the fundamental concepts of archeology through hands-on activities.

The lessons in the BEGINNING section assume that the educator and students have had little experience or study of archeology and past cultures. Lessons in the INTERMEDIATE and ADVANCED sections increase in complexity in terms of interest, knowledge, and application of archeological concepts. Although educators with no prior experience in archeology can teach the later lessons, they will also find that prior familiarity and use of the *Intrigue* guide is desirable and forms an excellent foundation. The later lessons draw upon and reinforce lessons from the *Intrigue* guide.

## *Each lesson is organized as follows:*

**Subjects:** Lists subjects such as science, social studies, language arts, art, and mathematics, which are addressed in the lesson. Subjects listed first are more strongly emphasized than those listed later.

**Skills:** Lists thinking skills used in the lesson, such as knowledge, comprehension, application, analysis, synthesis, and evaluation.

**Strategies:** Lists teaching strategies employed in the lesson, such as scientific inquiry, decision-making, problem-solving, writing, values clarification, and drawing.

**Duration:** Indicates time requirements for completing all the procedures in the classroom and on a field trip to Aztec Ruins, if the trip is part of the lesson. A class period is 45-55 minutes. Time needed does not include research and setup, and may vary according to the grade level and the way in which procedures are used.

**Class size:** Notes grouping or pairing needed for activities. Most lessons assume a class of 15 to 25 students.

**Objectives:** Lists the activities, content, process, and/or products of the lesson.

**Materials:** Lists materials needed. Common classroom materials, such as paper and pencil, are omitted from the list, but may be used in the activity.

**Vocabulary:** Defines key words used in the lesson.

**Background:** Information for the teacher to help her/him to feel more comfortable while teaching the lesson.

**Setting the Stage:** An initial activity to capture students' interest.

**Procedure:** Step-by-step process to teach the lesson.

**Closure:** An activity to conclude the lesson.

**Evaluation:** Suggestions for assessing student learning.

**Extensions:** Some lessons mention additional activities that expand the lesson, and suggestions for modifying and/or shortening procedures.

**References:** Sources from which background information was drawn or that are especially useful for the educator.

Lessons contain all the information needed to teach them. Activity sheets for students to complete are easily recognized by the heavy black band at the top, and are included in many of the lessons. Illustrations depict concepts and objects in the lessons, and include maps for locating places. Activity sheets and illustrations are reproducible both as transparencies or handouts.

We value your feedback. Please let us know how you used this guide, how it worked, and what we can do to improve and/or expand it. The last page of the guide is a form on which you can record your comments, and then mail or fax to the monument.

# Preparing for Your Visit

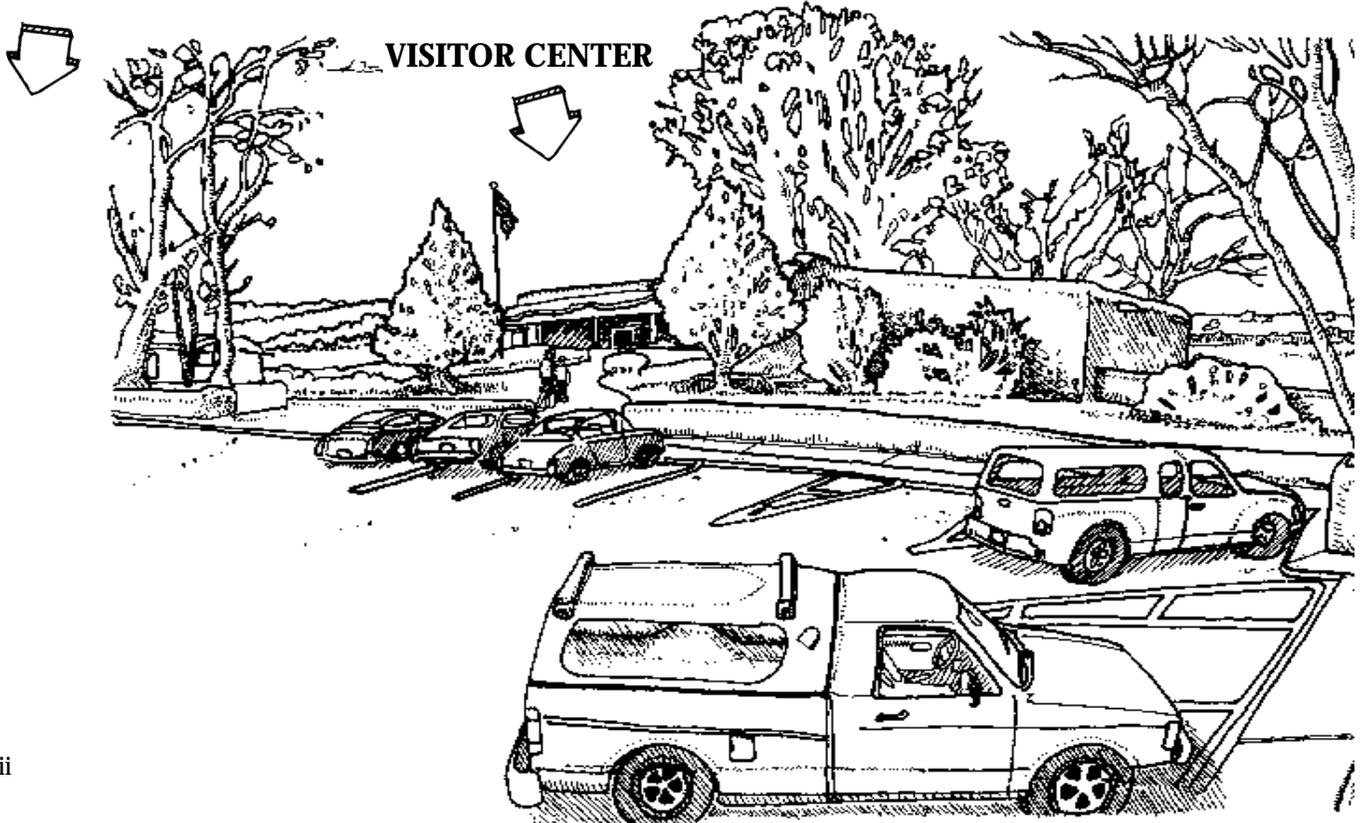
---

Aztec Ruins National Monument welcomes and encourages educators and students to visit the area frequently. We want your group to have the best experience possible, and suggest you prepare in the following ways:

Schedule your visit when there is less crowding. Avoid April and May, our busiest months for school groups. Contact a park ranger to schedule your visit. Go to the monument to familiarize yourself with the trail and exhibits and plan logistics. Although staffing limitations prevent us from talking with your group during its visit, park rangers are available to help you prepare for your field trip. Choose a lesson plan from this guide (or create your own) to satisfy your curriculum needs. Review the lesson plan and appropriate resource materials with a park ranger. Borrow or buy references – such as videos and the trunk of replica artifacts – from the monument (many are listed in the REFERENCE section of this guide and in each lesson). Borrow the video that is shown in the visitor center to watch in your classroom.

Make sure there are enough adult chaperones for your group, and prepare them and your students for the visit. Review their work assignments. Discuss the rules for visiting the monument. Mention that Aztec Ruins is spiritually and culturally important to many Southwestern American Indian tribes today. Many consider it a sacred ancestral home. Behavior that is mindful of this connection is appropriate. Be aware that the interpretive trail passes through rooms from which burials were excavated, and that many more still remain in place. For many visiting American Indian students, this is a sensitive concern, which you should discuss with them.

## BUS PARKING



# Guidelines for Visiting Aztec Ruins National Monument

We want you to visit safely, and to help preserve and protect the area so that future visitors will have the same experience that you have. Common sense and an awareness of the special meaning this place holds for many people should guide your behavior.

## **Walk between the lines**

Stay on the surfaced trail! This will protect ruin walls from being damaged and plants from getting trampled.

## **Look with your eyes, not your fingers**

Fingers should resist taking the plants, animals, rocks, and artifacts. Those things should stay where you see them. If you disturb an artifact, you will destroy the information its location gives us. Please do not touch or lean against the fragile plaster and mortar in the roofed rooms.

## **Don't be a rock climber**

Nine-hundred-year old walls are fragile! Although they look sturdy, they are sensitive to your weight. Loose rocks could cause you to fall.

## **Respect the great kiva**

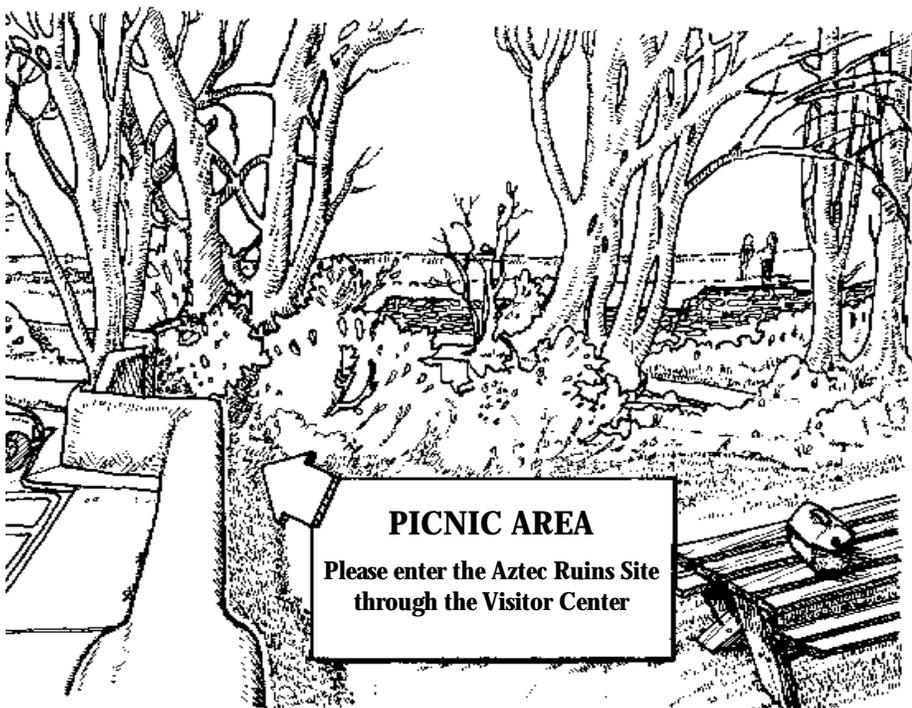
This building is sacred and special for many people. Enjoy it quietly, and refrain from climbing the small ladders.

## **Enjoy food and drinks in the picnic area**

Please keep the trail clean for everyone else.

## **Practice strolling, sauntering, and ambling**

Running just won't do here, where you could trip on uneven places on the trail.



# A Place for Connections

---

Since the late 1800s, travelers have sought discovery, recreation, knowledge, and inspiration at Aztec Ruins National Monument. Motivated by curiosity and a thirst for adventure, early visitors roamed the brush-covered mounds and eroding sandstone walls, examining the extensive structures left here and throughout the region by people unknown to them. Sometimes they scratched their names into wood beams they found embedded in roofs, or removed beautiful decorated pottery sherds and other artifacts. Their interpretations for these remains were based on little more than superficial observations. Indeed, the first Anglo settlers of the area attributed the origin of the site to the Aztec people from central Mexico – giving it a name that has persisted ever since.

“It’s great to know that something this spectacular is in our own backyard and people from all over the world come to see it.”

*Cody Rives  
10 years old*

Today, visitors from around the world walk through the largest of the structures at the site – the West Ruin – seeking information to help them understand the remains and the people who left them. Yearning for connections, they compare their own lives with the lives of the Ancestral Pueblo people. Why did they build here? What challenges did they face? What did they eat? How did they cope with drought, hunger, and death? How did they govern? In recent years, teachers and students have found an exciting way to integrate the learning of various curriculum subjects while exploring the site. Other visitors come not for knowledge, but for prayer or inspiration.

“You can learn about people from the past. It is important to preserve it so that people whose ancestors were here will continue to have this place so that they will know how their ancestors lived.”

*10-year-old visitor*

## **Tribal Connections**

Whatever their motives for coming, visitors benefit by the accumulated knowledge about this place. Much of this knowledge comes from archeology – a discipline that uses the scientific method to answer questions about peoples of the past. But additional perspectives and interpretations come directly from people of Southwestern tribes, many of whom are descended from the people who lived here. Their contributions to our understanding arise not from a scientific process, but from timeless traditions and stories passed orally from generation to generation, and from deeply felt spiritual and cultural connections.

Although the closeness of connections vary, many Southwestern tribes claim cultural ties with Aztec Ruins and other sites in the region. For the 20 Pueblo tribes in New Mexico and Arizona, the Four Corners area and the San Juan Basin are their ancestral homelands. In the Pueblos of Acoma, Zia, Laguna, Cochiti, San Felipe, Santo Domingo, and Zuni, migration stories refer to ancestral homelands around the Aztec area, and some specifically mention the Aztec site. At least nine clans in the Hopi Tribe trace their ancestry to Aztec Ruins, and the tribe refers to the site by a specific name. Although not a Pueblo tribe, traditional people of the Navajo Nation call Aztec Ruins “Kinteel,” which translates to “Great House” or “Wide House.” According to Navajo tradition, some people of Kinteel were incorporated into the Navajo way of life. Today, many Navajo ceremonies and stories, and specific clans, are associated with this site.

Emerging from a sense that the site is alive, sacred, and of continuing spiritual significance, American Indian interpretations sometimes disagree with archeological conclusions. But their interpretations are no less valid or meaningful to those who visit. Staff at Aztec Ruins National Monument continue to consult with Southwestern tribes and convey their understanding, feelings, and concerns about this place.

### **The Science of Archeology**

While American Indian knowledge of the site rarely changes, interpretations based on archeology frequently do change. Archeologists use the scientific method – a process in which after identifying a question about the behavior of people of the past, they propose a hypothesis, or explanation that can be tested. They perform research, and then use research information to evaluate the hypothesis and draw inferences. Archeologists constantly question each others’ methods of research and inferences, freely disagreeing, and finding evidence that supports contrasting conclusions. Long-held notions about the behavior of the people of the past can change rapidly because of new research or critical review of old research.

“It’s like you are walking into a different world.”

*Amanda Thomas  
10 years old*

The stories of Aztec have undergone such changes, ever since Earl Morris began the first organized archeological excavations of the site in 1916. The brief information presented here and in the background information of each lesson reflects some of the current archeological thought about the site, which will surely change as work continues.

### **Structures, People, and Uses**

The monument includes far more than the large building that visitors tour—the West Ruin. Within its 320-acre boundaries are the remains of additional multi-story structures called “great houses,” many smaller residential structures, earth mounds, middens, pithouse or kiva depressions, and road segments. This array of densely packed remains indicates an extensive presence and use in the area—far greater than what the familiar West Ruin alone suggests.

“We can learn from other peoples’ past. If you don’t know about the past, you don’t know if you are doing any better now.”

*Clayton Rabourn  
10 years old*

Many of these structures are on a nearby terrace overlooking the West Ruin. People built and used them by the late AD 1000s, and probably began planning the building of the other structures, including the one known as the West Ruin. The origin of the builders themselves is unclear. Pottery styles and the masonry and form of the buildings suggest at least a strong influence by the Chaco Canyon people who lived to the south. By AD 1111, these people began collecting wood to build the largest great house on the site, now known as the West Ruin. They erected most of the building within a few years, and continued to make additions over a decade or so. This masonry building of about 450 interconnected rooms rises to three stories in places, and surrounds a flat, open plaza. Within the plaza is a circular semi-subterranean building called the great kiva. Now reconstructed, it was used for community-wide events.

The West Ruin, with associated great kiva, is very similar in layout to the great houses that people built in Chaco Canyon and at more than a hundred sites across the San Juan Basin. Their similarity indicates that some kind of social, economic, religious, or political relationship existed among these “outlier” sites, with Chaco Canyon serving as a central but widespread influence. Some archeologists suggest that Aztec assumed higher visibility and importance as Chaco Canyon’s prominence waned during the latter years of the so-called “Chaco Phenomenon.”

The function of the West Ruin building at the time of its construction is unclear. Most archeologists agree that it was built primarily as a public building, not for residential use. Some archeologists suggest that there were periodic influxes of people to the site from surrounding areas for the purposes of ceremonial, administrative, trade, and/or social activities. While some archeologists maintain that only a very small core population lived in or near the building year round as caretakers, others say that inadequate information prevents them from making any inferences regarding residential use of the building.

People continued to use the building until about AD 1130 to 1150. The importance of Chaco Canyon and its connection to outliers had greatly receded, and the disuse of the West Ruin may reflect this shift. However, people may have continued to live in the nearby area. Then, in the early AD 1200s, people used the great house once again, modifying rooms to suit their needs, and attaching rooms to the exterior walls. They built another great house to the east, now called the East Ruin. These later people left remains similar to those found in the Mesa Verde region to the north. Items found within the West Ruin rooms suggest that their uses during that time period were for storage of food, building, and tool manufacturing materials; burial tombs; workshops; turkey pens; ceremonial areas; middens; and latrines. Just as for the earlier period, archeologists disagree about the extent of habitation of the Aztec great houses during the AD 1200s. Most agree that people did use some of the rooms to varying degrees for daily cooking and sleeping. In addition, rooms attached to the west side of the building and other small structures in the area served as residences.

### **Leaving the Area**

Occupation of the area continued until about AD 1300, when people left the area – and the entire region. Although it is difficult to trace the specific migrations of the Aztec people, they generally traveled southeast to the Rio Grande valley where they joined other existing pueblos, south to the Zuni area, or west to join the Hopi villages in Arizona.

Why they left is still unclear, and cannot be answered by citing one specific factor. People had farmed, hunted, and used resources from this area for 200 years or more, and depletion of resources could have been a factor in their leaving. In addition, an extended drought affected the region from AD 1276 to about AD 1299. For the people of Aztec, this drought, in combination with social and other factors, may have encouraged them to move to more hospitable areas.

## **The Words We Use**

Representatives from Southwestern tribes indicate that the vocabulary used to interpret their past is very important. They object most strongly to the word that for many years archeologists and visitors commonly used to describe the people who lived in these sites – “Anasazi.” Originating from the word “anaasázi” in the Navajo language, the expression is interpreted variously as “alien ancestors,” “ancient ancestors,” or “enemy ancestors,” depending on the Navajo speaker, the context of use, and pronunciation. Understanding it to mean “old people,” archeologists adopted the term in the 1930s, then popularized its use.

Each tribe refers to their ancestors by specific names. For example, Hopi speakers use the word “Hisatsinom,” and Zuni speakers use “Enote:que.” While Navajo speakers continue to use their word “Anaasázi,” most Pueblo people prefer that we use the term “Ancestral Puebloans” to refer to their ancestors. Many archeologists are adopting the use of this newer label, as are national parks and monuments. This guide also uses this term.

Another objectionable term is the use of the word “abandon” to describe people leaving a site. This word suggests a lack of interest and caring among the former occupants and their descendants about the place that is now uninhabited. Modern pueblo people retain close physical and spiritual ties to these ancestral places, and most believe that spirits still inhabit them. A preferred explanation is that people migrated, moved, or left a place.

The expression “rock art” is also avoided. Labeling early writings this way implies that they have only an artistic and commercial value, rather than an ongoing spiritual significance. Instead, this guide uses the relatively neutral and more specific words “petroglyphs” and “pictographs.”

This guide uses other sensitive words, mindful of the subtle negative or inaccurate connotations they may suggest. For instance, the word “ruin” means the remains of a fallen building, but to some it may also imply abandoned and devoid of life and significance. The word “prehistoric” describes events or things that occurred prior to written records, which, in the Southwest, is AD 1540, when Spanish explorers entered the region. However, to some people, prehistoric means prior to history, thus suggesting that the Pueblo people have no history before contact with Europeans.

Words are powerful communicators of values, feelings, prejudice, and perspective. When talking and teaching about people of the past, it is especially important to use our words with awareness and sensitivity.

# Looking Out a Pueblo Window

*Foreward by Dr. Gregory Cajete*

A

Aztec Ruins is one of the places the ancestors of today's Pueblo people stopped on their long migration. It is a special place because it so clearly characterizes the ingenious way in which the Ancestral Puebloan people met the special challenges of living in the desert and high mesa ecology. It is also a place that exquisitely exemplifies the spirit of place and community which Pueblo people have always treasured and attempted to perpetuate in the contemporary Pueblo communities that exist today.

## **The Bones of Our Ancestors**

Traditional Puebloan attitudes about ruins are that every place has its life and once it has been abandoned it is proper and respectful that it be allowed to return to the natural elements of which it was originally created. This percept certainly applies to the places that were once inhabited by Puebloan people. The nature and life of each of these places reside in the collective memory of the existing Pueblos. This memory is treasured and evoked when necessary as a way to help contemporary Puebloans remember what is important to them as a People.

## **Corn is Who We Are**

Corn is both a physical and spiritual symbol of the interdependence of Pueblo life with plant life and the Earth Mother. "Corn is who we are" is a metaphor that embodies this essential relationship. Corn is also a symbol of Pueblo community and relationship that can be expressed by the saying "We are all kernels on the same corn cob." This metaphor symbolizes the principle of "unity in diversity" or the fact that each Pueblo person is a unique individual yet is related to other Pueblo people – past, present, and future.

## **Pueblo Perceptions of Archeologists and Archeology**

The contemporary Pueblo attitude toward archeologists and archeology is one of ambivalence. This attitude is based on the understanding that, as a traditional people, we carry our history in our everyday life and presence. While we have learned to place value on the role of archeology and archeologists in helping to tell the details of our collective histories, we also know that both are based on a scientific world view which can significantly conflict with our own traditional values and world view.

### **The Pueblo Kiva: Gateway Between Worlds**

The Pueblo Kiva is both an ancient sacred symbol and a structure. It is a metaphoric gateway between the “realities” of Pueblo life and sacred history. It is the single most important communal structure in the Pueblo community, since it is the “meeting place” for all the symbolic realities that Pueblo people hold dear.

### **When Visiting Pueblo Ruins**

The key word is RESPECT. That is to say that you should view a visit to a Pueblo ruin the same way that you would view a visit to another person’s home or community. Treat a visit to a Pueblo ruin (or a contemporary Pueblo community) the same way you would want your home or community to be treated. Then let common sense guide you in terms of respect and honor for a place that once gave life to the People.

### **The Pueblo Sense of Place**

The San Juan Basin is an ensouled geography, and the relationship of Pueblo people to this geography embodies a “theology of place,” which reflects the very essence of what may be called spiritual ecology. The traditional relationship and participation of Pueblo people with this Southwestern landscape includes not only the land itself, but the very way in which they have perceived themselves and reality. Pueblo people, through generations of living in the Southwest, have formed and have been formed by the land. An intimate kinship with this land and its climate, soil, water, mountains, lakes, forests, streams, plants, and animals have literally determined the expressions of Pueblo theology. The land has become an extension of Pueblo thought and being because, as one Pueblo elder states, “It is this place that holds our memories and the bones of our people... this is the place that made us!”

There is a metaphor that Pueblo people use which, when translated into English, means “that place that the People talk about.” It is a metaphor that refers not only to a physical place, but also a place of consciousness and an orientation to sacred ecology. Sacred orientation to place and space is a key element of the ecological awareness and intimate relationship Puebloans established with their territory. Pueblo people have names for all of the places in their area that comprise important environmental features of the landscape. Pueblo languages are replete with environmentally-derived references based on the kind of natural characteristics and experiences they have had living in relationship with their landscape.

Puebloan experience with this region of North America is indeed very ancient. Indian people have lived in this landscape for probably 10,000 years or more. New Mexico is, indeed, a “Land of Enchantment,” because it has been consecrated by the lives and communities of so many Puebloan people. All Indian

people have a long view founded on an equally long experience with North America. This long view is reflected in another metaphor used by Tewa elders. The elders remind us of the importance of the long view when they say “pin peye obe” (look to the mountain). They use this phrase to remind us that we need to look at things as if we are looking out from the top of a mountain. Through this metaphor, they emphasize the essential importance of seeing things in the much broader perspective of considering what we are doing with regard for the generations that are yet to come. They remind us that in dealing with the landscape, we must think in terms of a relationship spanning 10-thousand, 20-thousand, or 30-thousand years.

Puebloans depicted this sort of ecological understanding in many forms, one of which is the symbolic mythic figure called “Kokopelli.” Kokopelli is the seed carrier, the spirit of Nature’s fertility, of good fortune, culture, art, music, and dance. Kokopelli is a reflection of the procreative powers of Nature and the creative powers of the human mind. Puebloans saw themselves as reflections of Kokopelli – as creative spirits in sacred interaction with natural places of the landscape, as bearers of unique gifts and planters of seeds. These perceptions of spiritual ecology related back to the guiding story shared by all Puebloans as People who emerged from the Earth’s navel at the time of creation. It was at that time in the remote past that the First People came to understand the meaning of their sacred relationship to the Earth and to “that place that the People talk about.”

It is also through their guiding stories of creation that Indian people have come to see the Earth as a feminine being to which all living things relate, with the landscape as the contours of her great body. Indian people represent these perceptions of life in relationship with the land in their oral traditions and through the symbols of art, ritual, and the attitudes and activities that all Indians have traditionally practiced. It is through these symbols and participating with the land in a kind of symbolic dance that we have traditionally maintained the memory of our relationship to our places. Through traditional art forms such as pottery, which are replete with designs based on our relationship to the land, its plants and animals, Indian people have symbolized their sense of identity as a People of Place. This continual establishing of relationship is not only for renewal and for remembering to remember who we are as a People, but it is also an attempt to perpetuate the spiritual ecology of the world as a whole. This is the complex of relationship, symbolism, attitude, and way of interacting with the land that comprises the Pueblo theology of place.

There is no more complete example of this theology than that of traditional Indian hunting or agriculture. For example, among the Puebloans, the domestication of plants and agricultural ways of being have been a part of the way we have expressed ourselves as a People since ancient times. We learned how to

adapt the cultivation of corn to many of the varied ecological places of the Southwest. The varied strains of corn which were developed were a direct result of our collective ecological understanding of the places in which we have lived through the generations. Corn became a sacrament and symbol of our life and relationship with the land. So corn, along with the other staple crops such as beans, squash, and other plants which we grew, became metaphors for the sacred relationships we had established with the land. The grand Corn Dances performed as part of Puebloan ecologically-based ceremonial cycles embody relationship as a way of living and being with place. The corn dances and other dances and rituals that comprise the annual Pueblo ceremonial cycles are our way of enacting and maintaining, year in and year out, one generation to the next, our connection to and understanding of the spiritual ecology of place. We do this because it is a way of continually remembering to remember what our relationship to our place is through our life and preserve our view of life for each of the generations that will follow. Once we break these sacred cycles, we will begin to forget about sacred ecology and will collectively begin to do the kinds of things to the land that we are seeing today.

In summary, Native people throughout the Americas have developed ecologically sound ways of living with the land. Traditionally, we understood and applied the concept of sustainability within an environment. This way of sustainable living evolved into numerous ways of maintaining harmony both at the individual and communal level in dynamic balance with the places in which Indian people have lived in North America. Our ceremonial traditions, combined with practical ecological knowledge, expressed our orientation to sacred ecology and formed the basis for a theology of place.

However, Indian people today live a dual existence. At times it is characterized by constantly trying to adapt ourselves to a mainstream social, political, and cultural system that is not our own. We are constantly faced with living in a larger society that does not really understand or respect our traditional life symbols, and our ecological perspectives, our understanding of relationship to the land, our traditional ways of remembering to remember who we are. In many ways, modern society does not know how to respect “that place that the People talk about!”

As an educator, I believe that a truly complete education ultimately has to be about helping to reconnect all people to an ecological sense of place . But it is not just the task of Indian people revitalizing and nourishing the sense of place in themselves. It has now become everyone’s task to “look to the mountain” and to learn to respect “that place that the People talk about!”

*Dr. Gregory Cajete is a member of the Pueblo of Santa Clara, and is currently an Assistant Professor in the College of Education for the University of New Mexico. He also is a private consultant, assisting schools and others to develop curriculum for culturally relevant science education programs.*

# Education Standards

## Relationship of lesson procedures to New Mexico education standards, grades 5 - 8

	Using Plants to Meet Basic Needs	Identifying Plants	Resources Near & Far	Corn	Directions to the Past	Graffiti	Poetry in Ruins	Impacts on the Environment	Now & Then: A Scavenger Hunt	Imagination Pots	Living in the Past, Present & Future	Life of an Artifact	Investigating Great Houses	Raising the Roofs	What Happened Here?
<b>Language Arts</b> Students will:															
1. Understand and use language arts for communication.	X	X	X	X	X	X	X	X	X		X	X	X	X	X
2. Understand and use language arts as a learning tool.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3. Listen and read for a variety of purposes.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4. Use a variety of listening and reading strategies appropriately.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5. Speak clearly and write effectively for a variety of audiences.		X	X	X	X	X	X	X	X		X	X	X		X
6. Speak and write clearly, effectively and correctly.		X	E	X	X	X	X	X	E		E	X	X		X
7. Respond personally, analytically and critically to written and spoken language and media.						X						X			
8. Appreciate and respect their own language, culture and literature, and will learn about the languages, cultures and literature of others.				E											
9. Use language and literature to gain insight into their own and other's lives, and to build understanding of the moral and aesthetic dimensions of human experience.			X	X	E	X	X	X	X			X			X
10. Use state-of-the-art computer and other technology to gather, use and synthesize information, and to create and communicate knowledge.	X	X	X	E							X	X	X	X	
<b>Social Studies</b> Students will:															
1. Use knowledge and cultural understanding to explain how the world's people cope with ever-changing conditions, examine issues from multiple perspectives, and respond to individual and cultural diversity.	X	X	X	X	X	X	X	X	X		X		X		X
3. Know, understand and apply the language tools and skills of social studies.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4. Know and understand the ways in which human beings view themselves and others over time.	X	X	X	X	X	X		X	X	X	X	X	X		X
5. Know and understand relationships and patterns in history in order to understand the past and present and to prepare for the future.				X		X		X		X	E	X			X
6. Know and understand how personal and group identities are shaped by culture, physical environment, individuals, groups, and institutions.									X						
10. Know and understand the impact of economic systems and institutions on individuals, families, businesses, communities, and governments.			X												
11. Know and understand the diverse, dynamic and ever-changing nature of culture.	X	X	X	X	X	X	X	X	X		X	X	X	X	X
12. Know and understand physical environments and their relationships to ecosystems and human activities.	X	X	X		X			X	X		X		X	X	
13. Know and understand the impact of science and technology on societies.		X			X				X		X	X	X		
14. Know and understand the role of global connections and interdependence between and among individuals, groups, societies, and nations.						X									

# Education Standards

## Relationship of lesson procedures to New Mexico education standards, grades 5 - 8

	Using Plants to Meet Basic Needs	Identifying Plants	Resources Near & Far	Corn	Directions to the Past	Craffiti	Poetry in Ruins	Impacts on the Environment	Now & Then: A Scavenger Hunt	Imagination Pots	Living in the Past, Present & Future	Life of an Artifact	Investigating Great Houses	Raising the Roofs	What Happened Here?
<b>Math</b> Students will:															
1. Understand and use mathematics in problem solving.				X				X					X	X	
2. Understand and use mathematics in communication.				X	X			X					X	X	E
3. Understand and use mathematics in reasoning.				X				X					X		
4. Understand and use mathematical connections.				X				X					X		
5. Understand and use numbers and number relationships.				X											E
6. Understand and use number systems and number theory.													X		
7. Understand and use computation and estimation.				X				X					X	X	
8. Have a foundation in geometric concepts.														X	
9. Understand and use measurement.				X	X			X					X	X	E
10. Understand and use statistics.				X									X	X	E
11. Understand and use probability.				X									X		
12. Understand and use patterns and functions.				X											
<b>Science</b> Students will:															
2. Use evidence, models, and explanations to explore the physical world.													X		
4. Understand the physical world through the concepts of change, equilibrium and measurement.								X							
5. Acquire the abilities to do scientific inquiry.				X	X			X				E	X	X	X
6. Understand the process of scientific inquiry				X							X	E	X	X	X
11. Know and understand synergy among organisms and the environments of organisms.	X	X													
<b>Art</b> Students will:															
1. Learn and develop the essential skills and technical demands unique to dance, music, theatre/drama and visual art.										X					
2. Use dance, music, theatre/drama and visual art to express ideas.	E		E	E						X	E				
3. Integrate understanding of visual and performing art by seeking connections and parallels among art disciplines as well as other content areas.										X					
4. Demonstrate an understanding of the dynamics of the creative process.										X					
5. Observe, discuss, analyze and make critical judgements about artistic works.				E						X					
6. Show increased awareness of diverse peoples and cultures through visual and performing art.				E						X					

E = procedure Extension



*Doorways at Aztec*